BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

Comments re	)	
A La Carte And Themed Tier	)	MB Docket No. 04-207
Programming And Pricing Options	)	
For Programming Distribution On	)	
Cable Television And Direct	)	
Broadcast Satellite Systems	)	

TECHNOLOGY AVAILABLE TO CONTROL A LA CARTE PROGRAMMING

JOINT COMMENTS
OF

BLONDER TONGUE LABORATORIES, INC
SAN BRUNO MUNICIPAL CABLE TV
STANFORD CABLE TELEVISION SERVICE

STANFORD UNIVERSITY

James A. Luksch
Blonder Tongue Laboratories, Inc.
One Jake Brown Road
Old Bridge, NJ 08857
(732) 679-4000

July 15, 2004

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

Comments re	)	
A La Carte And Themed Tier	)	MB Docket No. 04-207
Programming And Pricing Options	)	
For Programming Distribution On	)	
Cable Television And Direct	)	
Broadcast Satellite Systems	)	

TECHNOLOGY AVAILABLE TO CONTROL A LA CARTE PROGRAMMING

INTRODUCTION

This response to Docket #04-207 is a collective effort from the following organizations: Blonder Tongue Laboratories, Inc., San Bruno Municipal Cable TV, and Stanford Cable Television Service. The response has been accumulated and documented by Blonder Tongue. Specifically addressed is Section VI that requests information concerning potential technology to control a la carte programming. The technology discussed herein is the TV Channel Blocker which is based on Interdiction technology. Interdiction is utilized in the cable television systems of San Bruno and Stanford, and is manufactured by Blonder Tongue. Although the product is not currently employed to provide complete a la carte, it could easily do so (even without a set-top in the home) if the operator could secure the programming contract that allow the programs to be sold in smaller tiers or individually.

VI. SET-TOP BOXES

(a) Is an addressable converter box required for every television set on which a consumer might wish to view programming offered on an a la carte or themed-tier basis?

No. Although currently the use of a set-top converter is the primary means of controlling channels for tiering, there are other alternatives. The technology available today to control a la carte programming in households without set-tops include: V-chips, traps, and the TV Channel Blocker (which is based upon Interdiction technology). V-Chip

Technology enables parents to block TV programming based upon particular ratings. However, the V-chip has only existed in TVs since January 2000. There are millions and millions of TVs without V-chips. There also is a significant education process (~80% of parents who have TVs with the V-chip are unaware of it). There are a number of organizations that may provide further information on this topic.

Traps (or filters) may be used to remove a particular channel, or multiple channels. Each trap is physically installed and changes to the customer's service require a technician visit (or "truck roll") to the customer's site. This results in significant operational cost to the cable operator. The technology itself is unable to accommodate a wide array of a la carte offerings. Standard inexpensive single channel traps are available in lower frequency ranges, but as the frequency increases, the price of the trap increases and the performance decreases. Trapping channels in higher frequencies affects both the audio of the lower adjacent, as well as the video of the upper adjacent channel. If multiple channels are to be blocked, the signal quality is greatly diminished.

The TV Channel Blocker (TVCB) is the optimum solution for blocking unwanted channels in households without set-top boxes, or for providing a la carte control. The TVCB is based on Interdiction technology. Unlike traps, the TVCB provides individual channel control without adjacent channel degradation; in either lower or higher frequency ranges (up to 80 individually, independently blocked channels). A single unit may be located outside the home to provide "whole house" control of the analog channel line-up, i.e. the single unit outside the home provides control of channels before the signal enters the home. The analog channels are sent in the clear from the headend, and a particular channel is blocked or authorized for all household TVs in the unit. The unit is a fully addressable device (just like a set-top), therefore analog service changes and/or disconnects are performed remotely from the control computer. The control computer interfaces with the cable operator's billing system. The billing system controls the number of channels blocked and the tiering configuration, and the TVCB is capable of controlling each analog channel on an independent, individual basis. This is accomplished via voltage controlled oscillators within specific frequency bands. The

technology is capable of providing a la carte control of analog channels if the programming contracts were changed to allow it. Further information and detail may be obtained on the Blonder Tongue web site (www.blondertongue.com).

(b) What is the number of television sets that are not currently connected to addressable converter boxes?

There are a number of organizations better prepared to provide this information. Kagan Research estimates 42 Million households without set-top converters of any kind[1]. With an estimated 2.5 televisions per household, this results in approximately 105 million television sets currently not connected to addressable converters.

(c) What are the costs to consumers of buying or leasing these boxes?

The cost to consumers of buying or leasing digital set-top converters is the following for the respondents' systems:

San Bruno	$49.13/month (includes analog cable, basic digital programming plus first set-top and remote control) $8.40/month additional receiver/remote A concern with additional authorized set-tops is theft. The set-tops may be given to neighboring homes that are not subscribers to the service.
Stanford	$39.95-45.95/month (includes analog cable, basic digital programming plus first set-top and remote control) $7.95/month additional receiver/remote

*(d) Is an addressable converter box required for every television set on which a consumer might wish to view **digital programming**?*

There are a number of organizations better prepared to provide this information, particularly regarding the Digital Cable Ready initiative. This initiative only affects new

[1] *See* Kagan Research LLC, *Broadband Technology, Number 318, Transition to Digital Gains Momentum* January 21, 2004.

digital televisions and does not address legacy TVs. For legacy TVs without CableCARDs, digital set-tops will be required to view digital programming at every viewing location. If a la carte control is in the analog block of channels, a single TVCB may be used to provide control for the entire household as previously mentioned in sections VI (a).

(e) Is it true that a la carte or themed-tier services can only be offered on a digital basis?
No. Similar to the discussion in section VI (a) and (d), with the use of the TV Channel Blocker, a la carte programming can be offered to the entire household (every viewing location) for the analog channels without a digital converter. The digital converter would be required to tier or block digital channels.

(f) What percent of cable and satellite distributors offer digital programming to their subscribers?
There are a number of organizations better prepared to provide this information.

(g) What percent of consumers currently subscribe to digital programming packages?
There are a number of organizations better prepared to provide this information. The NCTA estimates that more than 30% of U.S. cable customers (22.9 million) subscribe to digital cable service.[2]

The percent of consumers currently subscribing to digital programming packages is the following for the respondents' systems:

San Bruno	7% of cable customers
Stanford	10% (students), 78% (faculty) of cable customers

Lower digital penetration in the San Bruno system is attributed to the use of Interdiction. Premium channels are offered on an a la carte basis in the analog block of channels (to

[2] *See* National Cable & Telecommunications Association, *2004 Mid-Year Industry Overview*, pg 7.

the whole house), as well as in the digital tier (requiring a digital set-top at each TV). The penetration of analog premium service is 30% of cable customers.

(h) What impact would an a la carte and themed-tier service have on the uni-directional plug-and-play regulations, and on the ongoing discussions regarding potential bi-directional plug-and-play regulations?

There are a number of organizations better prepared to provide this information, particularly regarding the Digital Cable Ready initiative. If the a la carte offering is in the analog block of channels, there is no impact on the plug-and-play regulations.

CONCLUSION

The a la carte issue is multi-faceted: programming rates, diversity of programming, consumer choice, and finally technology. It is the intent of the respondents not to comment on all facets, only to make known a technology that may be utilized should a la carte be implemented. The TV Channel Blocker, and Interdiction technology in general, is a mean of controlling in the clear analog channels without the need for set-tops in every home, or on every TV.

Respectfully submitted,

Al Johnson
San Bruno Municipal Cable TV

Robert Drewes
Stanford Cable Television Service

James Luksch
Blonder Tongue Laboratories, Inc.
One Jake Brown Rd.
Old Bridge, NJ 08857
(732) 679-4000

ABOUT...

SAN BRUNO CABLE

San Bruno Municipal Cable TV serves the community of San Bruno, California. It remains one of the largest "municipality" owned cable systems in the United States. Our cable system has the capacity to deliver up to 78 analog channels, more than 200 digital channels, full two-way communication and internet access and an "interdiction" delivery system. San Bruno Cable TV utilizes "state of the art" technology to bring our subscribers high quality pictures. San Bruno Cable TV continues to focus on efficient customer service and inter-connection of City Departments, while maintaining our commitment to the community. San Bruno Cable TV passes 15,600 households with 11,700 cable subscribers and 3,000 internet subscribers.

STANFORD CABLE TELEVISION SERVICE

STV, AcademicTV and Stanford West are optional, University-operated cable television systems that add a rich layer of entertainment, sports, news, cultural and educational programming to the Stanford campus. These three cable systems serve the Stanford community with up to 200 channels of analog and digital programming. Through the use of addressable taps, control of 77 channels of analog service is achieved without “truck rolls”. Additional performance is provided through the use of digital set top boxes. In addition to locally originated programming, a full selection of entertainment, premium and impulse PPV programs are also available.

BLONDER TONGUE

Blonder Tongue Laboratories is a U.S. designer, manufacturer, and supplier of a comprehensive line of electronics and systems equipment and technical services for the franchised and private cable television industries. Founded in 1950, Blonder Tongue offers a comprehensive line of products and services for Video, Voice and Data offerings. With optimized technologies and simplified equipment deployment and operation the operator can reduce costs, increase customer satisfaction and increase profitability. Blonder Tongue’s offices are headquartered in Old Bridge, New Jersey consisting of a 130,000 square foot facility. The Company is traded on the American Stock Exchange (AMEX) under the ticker symbol: BDR since 1995.